

Notice of Allowability

Application No.

09/820,401

Examiner

James S. Wozniak

Applicant(s)

KAHN, MICHAEL

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/21/2005.
2. ☒ The allowed claim(s) is/are 1-4, 7-13, 16, 17 and 19 (now 1-14).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

W. R. YOUNG
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

1. In response to the office action from 6/21/2005, the applicant has submitted an amendment, filed 9/21/2005, amending claims 1, 11, and 16, while canceling claims 5-6, 14-15, 18, and 20. In light of the claim amendments and for the reasons listed below in the reasons for allowance, claims 1-4, 7-13, 16-17, and 19 are allowable over the prior art of record.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kenneth Nigon (Reg. No. 31,549) on 9/27/2005.

3. The application has been amended as follows:

In claim 16, lines 1-2, change "A computer readable carrier including computer program instructions" to -A computer readable carrier including computer program instructions tangibly embodied thereon--.

4. **Claims 1-4, 7-13, 16-17, and 19** are allowable over the prior art of record.

5. The following is an examiner's statement of reasons for allowance:

With respect to **Claims 1, 7, and 11**, the prior art of record fails to explicitly teach or fairly suggest a method and system for generating and displaying closed captions generated using speaker-dependent speech recognition to identify words corresponding to speech components when it is determined that a television signal does not include a closed caption, wherein the speaker-dependent speech recognition is based on Hidden Markov Models (HMMs) that are updated according to training text received as part of a television signal and an television audio signal speech portion. The prior art of record also fails to explicitly teach or fairly suggest the aforementioned system and method in combination with audio signal processing for speech recognition utilizing spectral subtraction to extract speech. Although Lange et al (U.S. Pub: 2001/0025241) teach the generation of captions using speech recognition, Boll ("*Suppression of Acoustic Noise in Speech Using Spectral Subtraction*," 1979) teaches the use of spectral subtraction, and Hauptmann et al. ("*Text, Speech, and Vision for Video Segmentation: The Informedia Project*," 1995) teach generating captions using speech recognition when a television signal does not contain a closed caption, none of the cited prior art, either alone or in combination, recites the above noted caption generation method and system in combination with the HMMs that are updated according to training text received as a part of a television signal and an television audio signal speech portion. Thus, for the preceding reasons, claims 1 and 11 are allowable over the prior art of record.

Claim 16 contains subject matter similar to that of claim 1, and thus, is allowable over the prior art of record for the same reasons. Furthermore, the computer readable carrier including computer program instructions *tangibly embodied thereon*, recited in claim 16, *refers only to the tangible computer readable carriers* listed on page 12 of the specification which include: an integrated circuit, memory card, and magnetic or optical disks, and *not* the intangible carriers: optical, audio-frequency, or radio-frequency carrier waves.

Claims 2-4, 8-10, 12-13, 17 and 19 further limit an allowed independent claim, and thus, are also allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

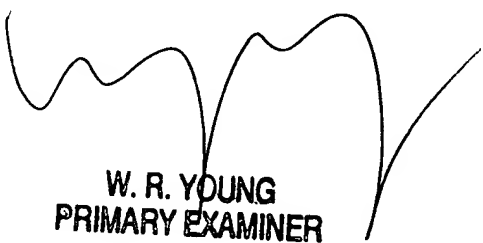
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
9/27/2005



W. R. YOUNG
PRIMARY EXAMINER